

(No Model.)

O. WIENER, H. COATES & S. WIENER.

BRIDLE BIT.

No. 285,717.

Patented Sept. 25, 1883.

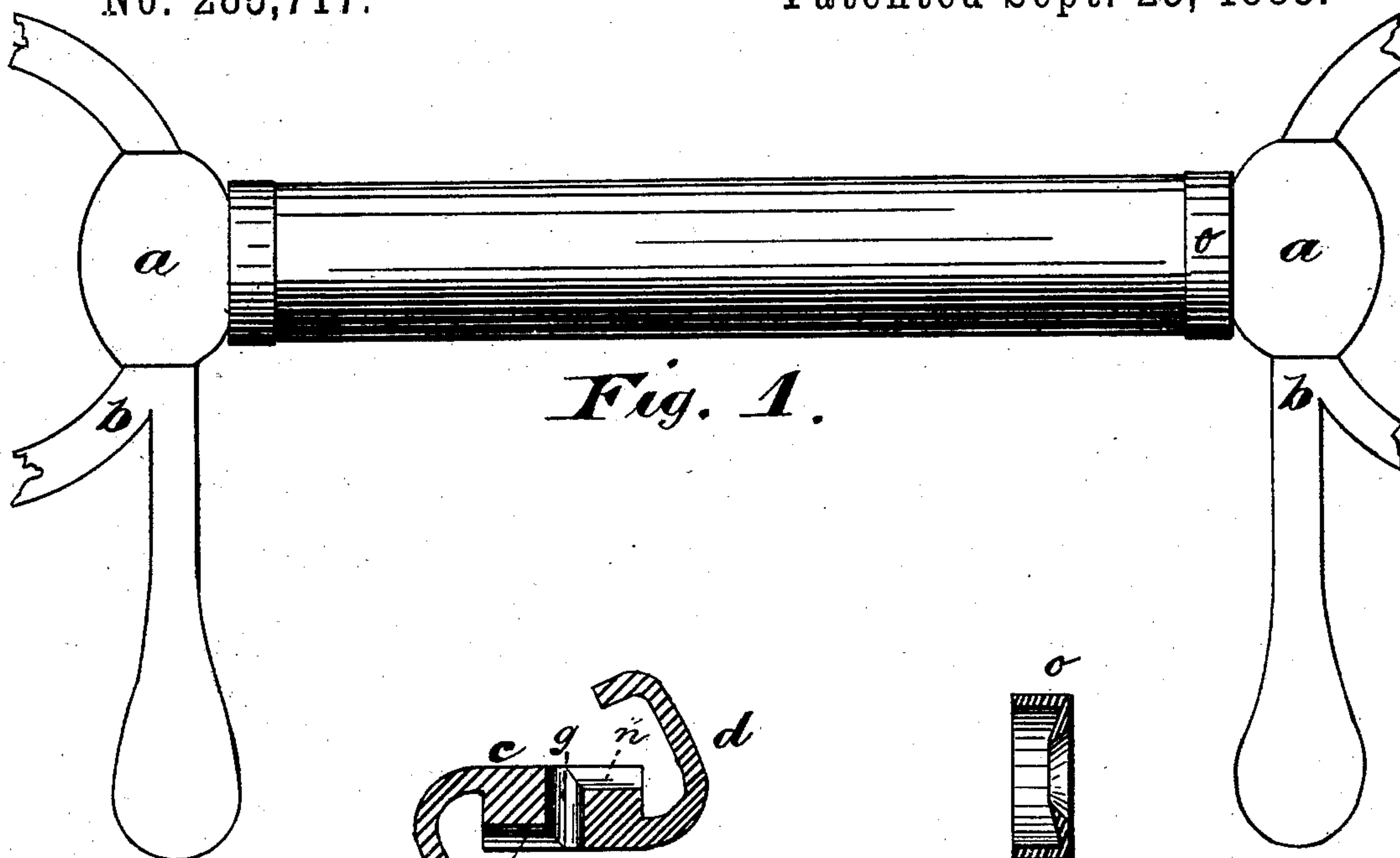


Fig. 1.

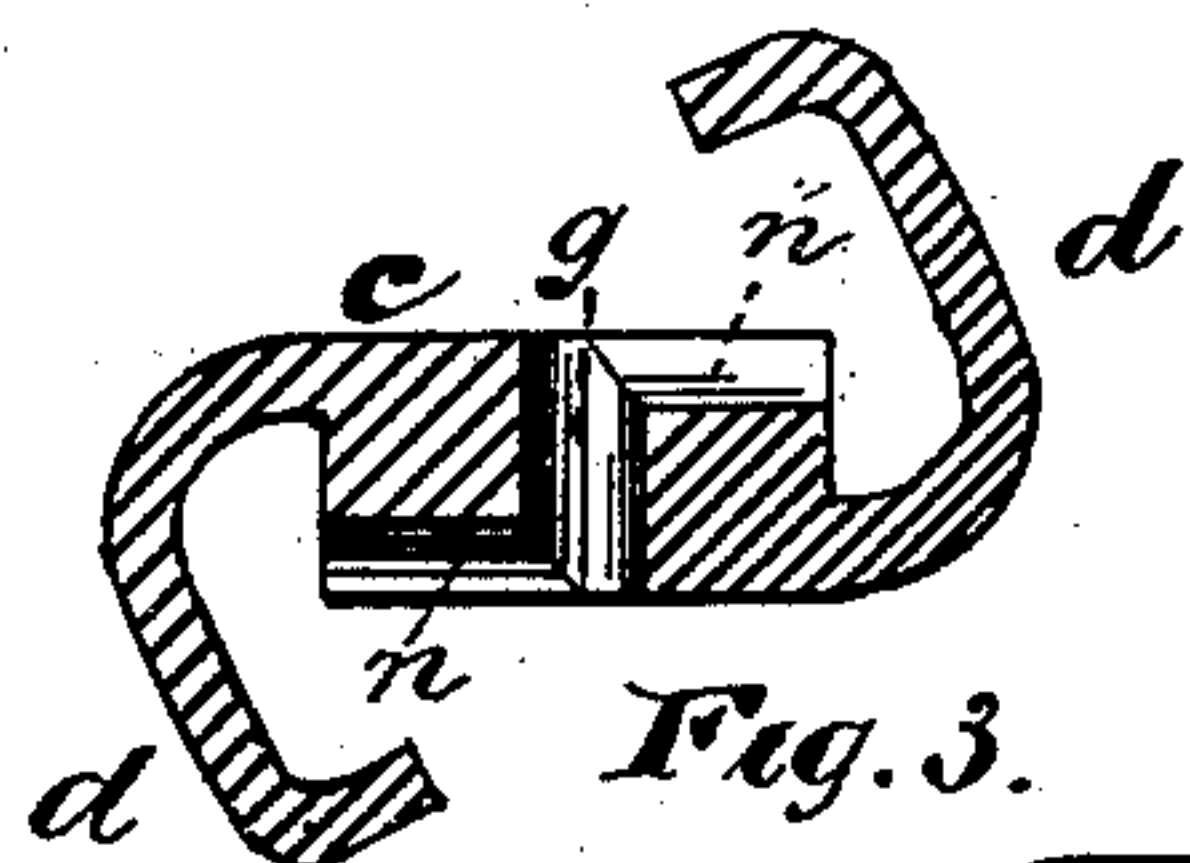


Fig. 3.



Fig. 5.

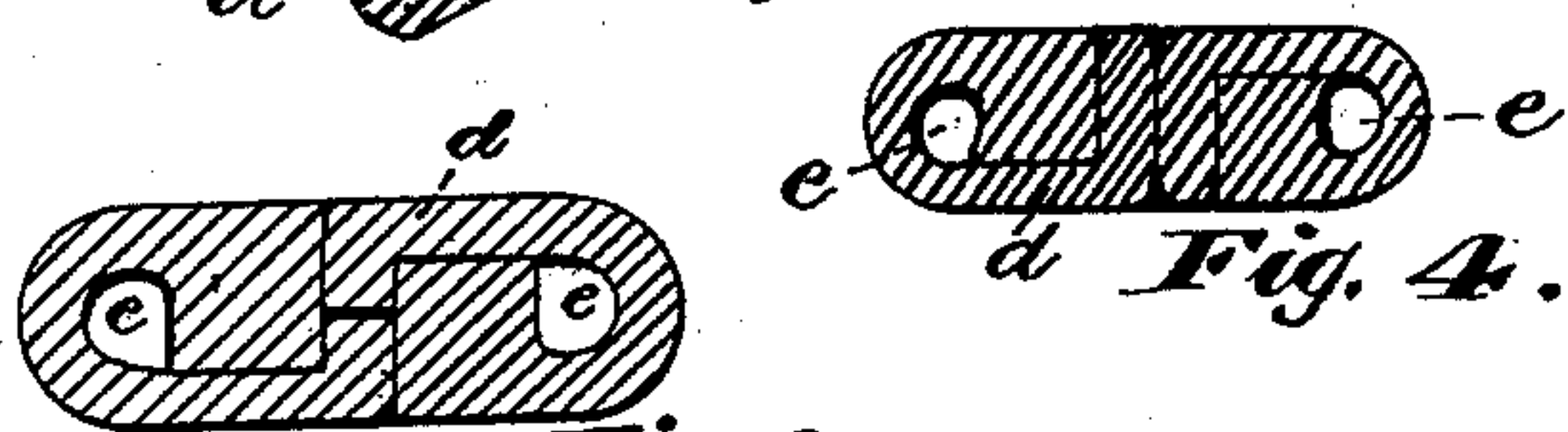


Fig. 4.

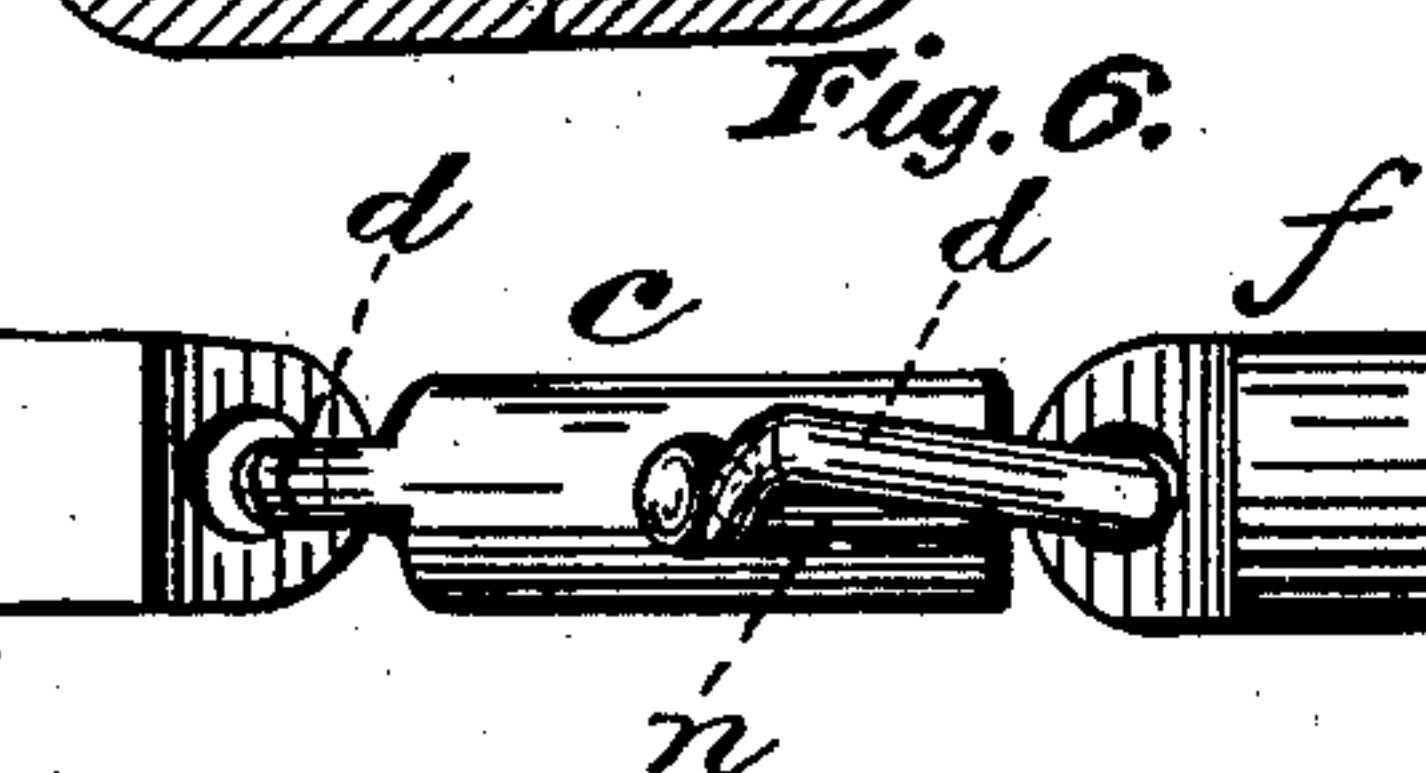


Fig. 6.

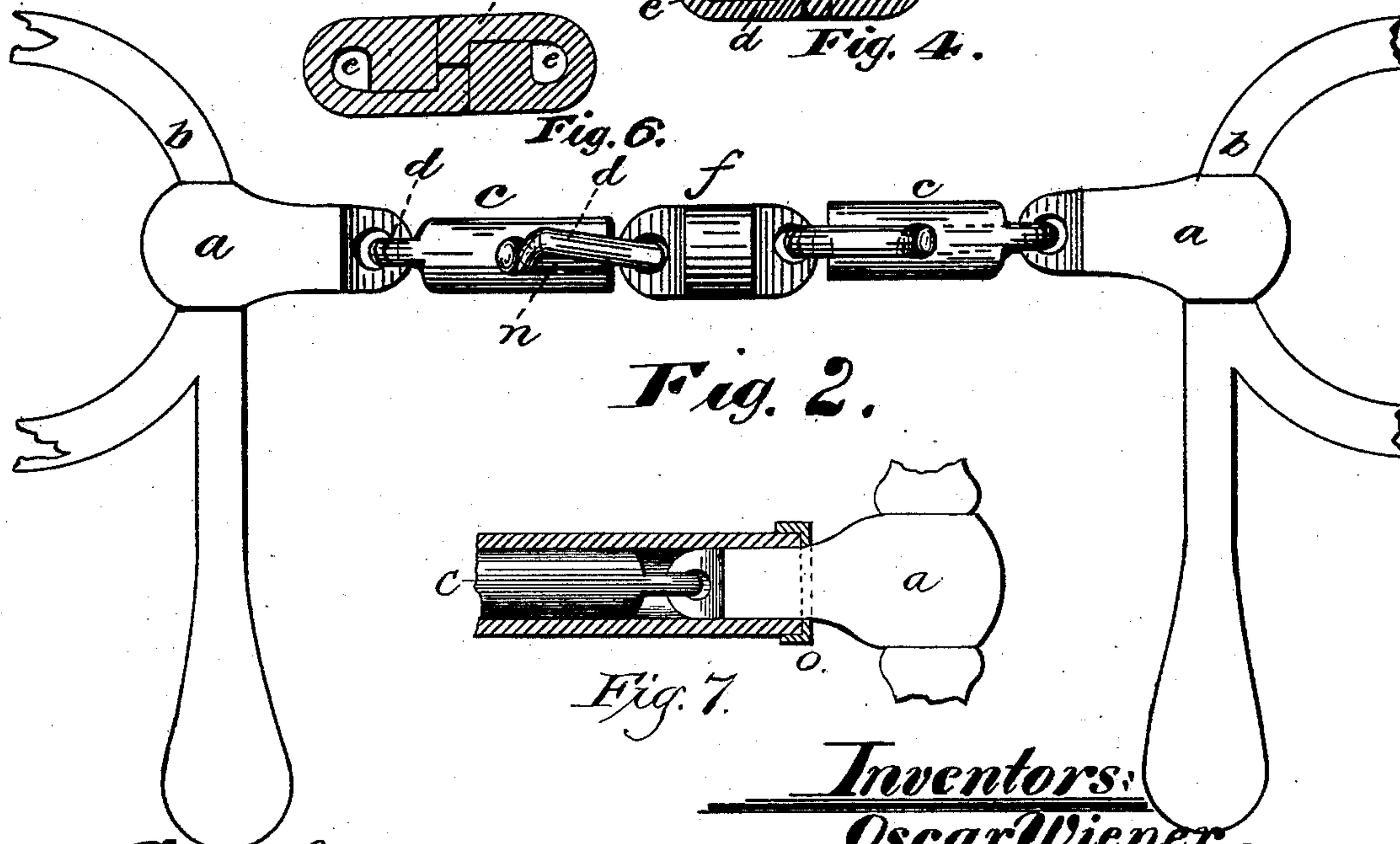


Fig. 2.

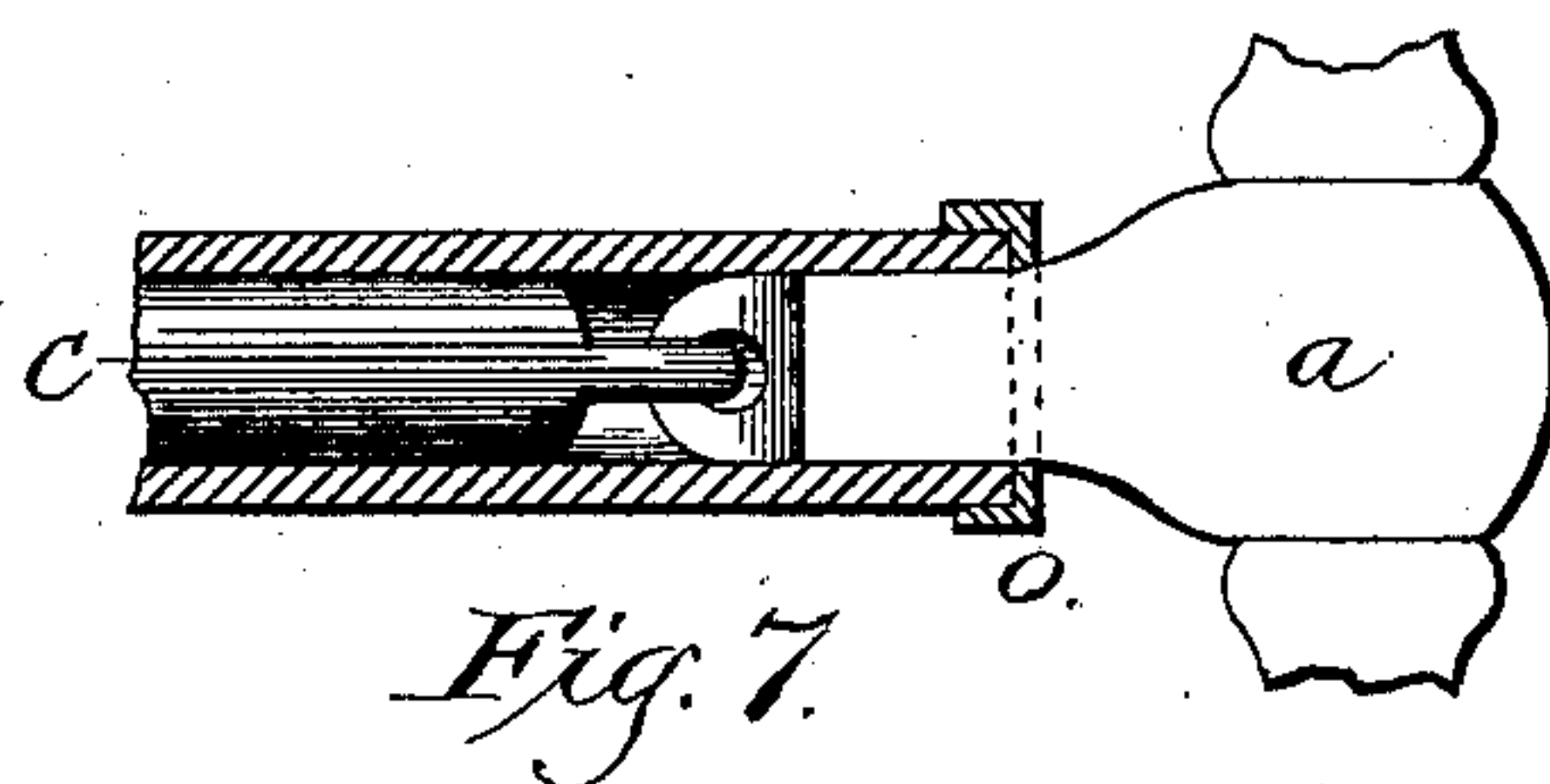


Fig. 7.

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UNITED STATES PATENT OFFICE.

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BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 285,717, dated September 25, 1883.

Application filed December 1, 1882. (No model.)

To all whom it may concern:

Be it known that we, OSCAR WIENER, HENRY COATES, and SIMON WIENER, citizens of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Bridle-Bits; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates more especially to that class of bridle-bits having the mouth-piece thereof covered with a flexible covering, preferably formed of rubber tubing, the object being to give greater strength to the bit, to facilitate the construction of the same, and to improve its appearance.

The invention consists in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the claims.

Referring to the accompanying drawings, in which similar letters of reference indicate like parts in each of the several figures, Figure 1 is a view indicating a complete bit to which our improvements have been attached. Fig. 2 is a view of the same with the covering removed, illustrating the internal arrangement of the mouth-piece. Figs. 3 and 4 are detail sectional views of certain peculiarly-formed links, the former of said figures showing the link open and the latter showing the same in a closed condition. Fig. 5 is a detail sectional view of a cap adapted to receive the ends of the rubber covering and protect the same. Fig. 6 illustrates a modified form of our improved link, and Fig. 7 illustrates more clearly the before-mentioned cap or collar in engagement with said rubber covering.

In carrying out our invention we form head-pieces *a a*, in which the cheek-pieces *b* are secured, said head-pieces having perforations therein adapted to receive the link *c*. Said link *c* is formed of one piece of metal, and has arms *d* projecting from the body portion thereof, which are bent around to form a link-eye, *e*, at each end of the link. The ends of said arms, after forming the eyes, are secured in a

socket, which may be a perforation, *g*, through the body portion of the link, as shown in Figs. 2, 3, and 4. The edges of the link are or may be grooved, as at *n*, to receive the arms *d* in their passage from the link-eyes to the central socket above referred to, so that when said arms are bent into position they will be flush with the surface of the body portion of the link, as shown in Fig. 4, thus making a smooth and approximately cylindrical mouth-piece, adapted to conform to the tubular covering. The grooves *n* also give greater strength to the arms *d*, so that any twisting upon the bit will not cause the extremities of said arms to withdraw from the socket. Around the head-pieces *a* we arrange collars *o*, which are formed in separate pieces from the heads, thus adapting said collars to be turned from steel, whereby great strength is imparted to them, and they are capable of receiving a high finish. Said collars, being recessed, receive the ends of the tubular covering, their flanges overlapping the ends of the rubber, as will be understood. The said collars are also formed to engage with the bulbed heads *a*, as shown in Fig. 5.

It is evident that the link, as such, may be employed in other than bridle-bits, its simplicity of construction and strength adapting it to be employed in chains for martingales, &c.

The bit constructed as above described is produced at small cost, is capable of receiving a fine finish, and is stronger than other bits of the same class now in the market.

We are aware that it is not new to form a separable piece on the heads of bits to engage with the ends of the covering, and this feature we do not claim, broadly. We are not aware, however, that a collar separable from the head has been arranged to cover or overlap the extremities of the tubular covering, as herein shown, whereby said extremities are protected and the saliva and other matter from the horse's mouth is prevented from entering and accumulating within said tubular covering.

Having thus described our invention, what we claim as new, and wish to have secured by Letters Patent, is—

1. In a bridle-bit, the improved link composed of the body *c*, having a central perforation or socket, *g*, and groove *n* therein, and the projecting arms *d*, bent to form the link-eyes,

and lying in said grooves and socket, all substantially as herein set forth and shown.

2. In combination, the cheek-pieces *b*, heads *a*, receiving said cheek-pieces, links *c*, having
5 arms *d*, lying in grooves *n*, and the socket *g*, said arms being integral with the body portion of said links, and a central link, *f*, all said parts being constructed and arranged substantially as herein set forth and shown.

to 3. In a bridle-bit, the combination of the mouth-piece, having the links composed of the body *c*, having a central perforation or socket, *g*, groove *n*, and projecting arms *d*, bent to form link-eyes, and lying in said grooves and socket,

the flexible covering, and the separable col- 15
lars *o*, adapted to overlap and cover the extremities of said flexible covering, all substantially as herein set forth and shown.

In testimony that we claim the foregoing we have hereunto set our hands this 24th day of 20
November, 1882.

OSCAR WIENER.
HENRY COATES.
SIMON WIENER.

Witnesses:

CHARLES H. PELL,
OLIVER DRAKE.